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10/551,562

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EXAMINER

ARTHUR JEANGLAUDE, GERTRUDE

ART UNIT

PAPER NUMBER

3661

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |  |                               |  |
|------------------------------|--|-------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/551,562          | Applicant(s)<br>NARUSE ET AL. |  |
|                              | Examiner<br>Gertrude Arthur-Jeanglaude | Art Unit<br>3661              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/3/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

Claims 1-2, 4-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the measured value" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim.

The measuring step does not give any specific detail that an output or measured value was obtained in the claim.

Claim 2, is also rejected for incorporating the deficiencies of its base claim.

Claim 4 recites the limitation "the result of analysis" in lines 14-15. There is insufficient antecedent basis for this limitation in the claim.

Claims 5-10 are also rejected for incorporating the deficiencies of its base claim

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naruse et al. (U.S. Patent No. 6,374,159).

As to claim 1, Naruse et al. disclose a vehicle state analyzing method, comprising a suspension/chassis setting step for setting an optimum suspension/chassis for a vehicle; Naruse does not specifically disclose a first measuring step and a second measuring step. However, Naruse et al. disclose values of the measurement of the lateral force from the first timing to the second timing which is well considered as a first measuring step for measuring fluctuation or fluctuation rate of a lateral force in the vehicle which is set; a second measuring step for measuring fluctuation or fluctuation rate of a lateral force in the vehicle thereafter (See col. 26, lines 11-22); it also discloses that the values of the measurements are processed (computed); Naruse et al. also disclose a comparing and computing step for comparing and computing of the measured value obtained at the first measuring step and the measured value obtained at the second measuring step (considered as a comparison is made between a transition of one of the lateral force see col. 10, lines 28-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Naruse et al. by having a comparing and computing step for comparing and computing of the measured value obtained at the first measuring step and the measured value obtained at the second measuring step in order to have an adjusted wheel alignment.

As to claim 2, Naruse et al. disclose the fluctuation or the fluctuation rate of the lateral force is measured when normal running of the vehicle (See col. 3, lines 33-46).

As to claim 4, Naruse et al. disclose a vehicle state analyzing system for analyzing state of a vehicle having wheels, comprising: a force sensor (124 as shown in Fig. 11) for detecting input of force from the wheel to the vehicle body; Naruse discloses the results are stored as shown in Fig. 11 (#136) but fail to specifically disclose a first memory and a second memory. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the storage system of Naruse et al. by having a first memory means for storing information related to output of the force sensor when the vehicle which is set to be an optimum alignment state is run under a predetermined condition as a reference value; and a second memory means for storing information related to output of the force sensor when normal running of the vehicle; analyzing computation means for monitoring the output of the force sensor, and, on the basis of at least the information stored in the first memory means and the information stored in the second memory means, for analyzing the state of the vehicle; and information output means for outputting at least one of the information stored in the first memory means, the information stored in the second memory means, and the result of analysis obtained by the analyzing computation means (See Fig. 12, #164 for the computation means).

As to claim 5, Naruse et al. disclose the force sensor is provided in the vehicle, (the first memory means, the second memory means) as (storage means as shown in Fig. 11), the analyzing computation means, and the information output means are provided outside the vehicle (See Fig. 12 for outputting the means to a display outside the vehicle).

As to claim 6, Naruse et al. disclose a vehicle comprising: at least the force sensor as discussed; and transmission means for transmitting the information obtained from the force sensor to the outside of the vehicle (See col. 20, lines 47-57).

As to claim 7, Naruse et al. disclose a vehicle on which the vehicle state analyzing system is mounted (See col. 9, lines 25-50).

As to claim 8, Naruse et al. disclose a vehicle comprising: the vehicle state analyzing system ; and display means (unit 82) for displaying the state of the vehicle obtained by the analyzing computation means (See col. 27, lines 10-22).

As to claim 9, Naruse et al. disclose a vehicle comprising: the vehicle state analyzing system ; and adjustment means for automatically adjusting alignment of a suspension on the basis of the state of the vehicle analyzed by the analyzing computation means (See col. 6, lines 48-60).

As to claim 10, Naruse et al. disclose a vehicle state management system, comprising: the vehicle state analyzing system; and a vehicle testing apparatus having a road surface for running which causes the wheels to be rotated, detecting the state of the vehicle from outside, and being capable of storing the state of the vehicle detected from the outside and the state of the vehicle analyzed by the vehicle state analyzing system (See col. 9, lines 25-50).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 3 is rejected under 35 U.S.C. 102(e) as being anticipated by Naruse et al. (U.S. Patent No. 6,374,159).

As to claim 3, Naruse et al. disclose a vehicle state analyzing system for analyzing state of a vehicle having wheels, comprising: measuring means, provided in the vehicle, for measuring fluctuation or fluctuation rate of lateral force inputted to the vehicle through the wheel (See col. 5, lines 16-62); and computing means for computing time dependent change of data measured by the measuring means (calculating is considered as a computing means; see abstract; col. 26, lines 11-22).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is

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(571) 272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Gertrude A. Jeanglaude  
Primary Examiner  
AU 3661

gaj